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COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

PUBLIC SERVICE
COMMISSION

In the Matter of:

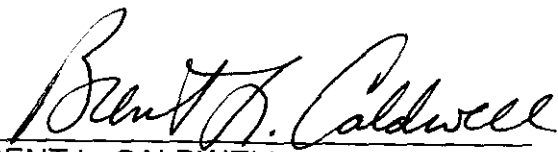
APPLICATION OF KENTUCKY POWER COMPANY)
d/b/a AMERICAN ELECTRIC POWER FOR)
APPROVAL, TO THE EXTENT NECESSARY,) Case No. 2002-00475
TO TRANSFER FUNCTIONAL CONTROL OF)
TRANSMISSION FACILITIES LOCATED IN)
KENTUCKY TO PJM INTERCONNECTION, L.L.C.)
PURSUANT TO KRS 278.218)

NOTICE OF FILING OF SUPPLEMENTAL DATA RESPONSES

PJM Interconnection, L.L.C., by counsel, hereby gives Notice to the Kentucky Public Service Commission ("Commission") and all parties of record that it hereby files with the Commission its Supplemental Data Responses to the Commission's oral data requests presented at the hearing in the above-styled matter.

Respectfully submitted,

MCBRAYER, MCGINNIS, LESLIE
& KIRKLAND, PLLC
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BRENT L. CALDWELL
ATTORNEY FOR
PJM INTERCONNECTION, LLC

CERTIFICATE OF SERVICE

This is to certify that a true and correct copy of the Supplemental Data Responses were served the 11th day of April, 2003, as follows:

Original and ten (10) copies were deposited in the Night Drop Box at the:
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, KY 40601

Copies of the Supplemental Data Requests were served via U.S. mail, postage pre-paid upon:

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BRENT L. CALDWELL

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PJM's ANSWERS TO HEARING DATA REQUESTS

Amount of Transmission Built/Under Construction in PJM Since 1999

Transmission Upgrades In PJM Regional Transmission Plan	(M\$)	Paid By
Substation Facilities	\$90	*
New Transmission Lines	\$94	(see below for detail)
Parallel Transmission/Transformer	\$80	*
Upgraded Transmission Lines	\$180	*
Total Network Upgrades	\$440	
Direct Generation Connection Facilities	\$284	Generation Developers
Total Direct Connection + Network Upgrades	\$728	

New Transmission Lines Detail	Cost (M\$)	Miles**	State	Paid By
Construct Yorkanna - Otter Creek 230 kV and Otter Creek substation	\$22.30	7.5	Pennsylvania	Transmission Owner
Build a new 138 kV circuit between Essex and Kearny 1-3 substations	\$2.00	2	New Jersey	Transmission Owner
Construct new 230 kV circuit between Cardiff and Oyster Creek	\$58.00	40	New Jersey	Transmission Owner
Second Mickleton - Monroe 230kV	\$11.48	18.5	New Jersey	Generation Developers

*PJM is currently working on collating the data on which facilities were paid for by generation developers and which were paid for by transmission owners. PJM will file this information by April 17, 2003.

**all mileage for new circuits is approximate until construction is complete

PJM's Cost-Causation Analysis

To determine cost causation, PJM uses a "but for" analysis: "but for" the action of a particular generator would the upgrade have been needed? If the action would have otherwise been needed, but the addition of the generator accelerated the need for the

upgrade, the generator bears the cost but is entitled to a credit for the fact that the upgrade would otherwise have been needed. Even if it is determined that the cost should be borne by the general class of ratepayers, those costs are borne by that particular PJM zone (i.e., the service territory of the transmission provider).

Section 37 of the OATT sets forth the cost responsibility for necessary facilities and upgrades. Both Schedule 6 of the PJM Operating Agreement¹ and Section 37 of the PJM OATT² are also pertinent in determining which party bears the cost of upgrades. The current PJM OATT, Operating Agreement and the proposed amendments filed at FERC are available on the PJM webpage: www.pjm.com. In an effort to make it more convenient, we have provided all of the relevant text in this document.

The details of the distribution are found in Section 37 of the PJM OATT. In particular, Section 37.3 of the OATT address "additional upgrades." The current Section 37.3 of the OATT provides:

37.3 Additional Upgrades: In the event that, in the context of the Regional Transmission Expansion Plan, it is determined that, to accommodate an Interconnection Request, it is more economical or beneficial to the Transmission System to construct upgrades in addition to the minimum necessary to accommodate the Interconnection Request, an Interconnection Customer shall be obligated to pay only the costs of the minimum upgrades necessary to accommodate its Interconnection Request.

The remaining costs shall be borne by the Transmission Owners in accordance with Schedule 6 of the Operating Agreement and may be included in the revenue requirements of the Transmission Owners subject to FERC approval.

If, based upon the date of the submission of a subsequent Interconnection Request, the Transmission Provider determines that an Interconnection Customer will make use of additional economic capacity that exists or will exist as a result of facilities and upgrades constructed as a result of another Interconnection Request, then the Transmission Provider may require the subsequent Interconnection Customer to pay an appropriate portion of the cost of the facilities and upgrades that produced the additional economic capacity.

¹ PJM Operating Agreement, Second Revised Rate Schedule FERC No. 24, filed to comply with order of the Federal Energy Regulatory Commission, Docket No RT01-98-000, issued July 12, 2001, 96 FERC ¶ 61,060(2001); includes FERC approved revisions as of February 21, 2003.

² PJM Open Access Transmission Tariff, Fifth Revised Volume, No.1, as approved in Docket No. RT01-98-000, issued July 12, 2001, 96 FERC ¶ 61,060 (2001); includes FERC approved revisions as of February 21, 2003.

In an effort to help place the current and the proposed OATT Section 37.3 into context, we are providing the **current** OATT Section 37 below.

37 Cost Responsibility for Necessary Facilities and Upgrades

37.1 Attachment Facilities: An Interconnection Customer shall be obligated to pay for 100 percent of the costs of the Attachment Facilities necessary to accommodate its Interconnection Request.

37.2 Local and Network Upgrades: An Interconnection Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Local Upgrades and Network Upgrades necessary to accommodate its Interconnection Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such Interconnection Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of planned Local Upgrades and Network Upgrades, the construction of unplanned Local Upgrades and Network Upgrades, and Local and Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the Interconnection Request.

37.3 Additional Upgrades: In the event that, in the context of the Regional Transmission Expansion Plan, it is determined that, to accommodate an Interconnection Request, it is more economical or beneficial to the Transmission System to construct upgrades in addition to the minimum necessary to accommodate the Interconnection Request, an Interconnection Customer shall be obligated to pay only the costs of the minimum upgrades necessary to accommodate its Interconnection Request. The remaining costs shall be borne by the Transmission Owners in accordance with Schedule 6 of the Operating Agreement and may be included in the revenue requirements of the Transmission Owners subject to FERC approval. If, based upon the date of the submission of a subsequent Interconnection Request, the Transmission Provider determines that an Interconnection Customer will make use of additional economic capacity that exists or will exist as a result of facilities and upgrades constructed as a result of another Interconnection Request, then the Transmission Provider may require the subsequent Interconnection Customer to pay an appropriate portion of the cost of the facilities and upgrades that produced the additional economic capacity.

37.4 Specification of Costs in Interconnection Service Agreement: The cost responsibility of the Interconnection Customer shall be specified in the Interconnection Service Agreement executed pursuant to Section 36.8 of the Tariff. If an Interconnection Customer does not agree with the

Transmission Provider's determination of such cost responsibility, it may request that the matter be submitted to Dispute Resolution under Article 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement, or request that an unexecuted Interconnection Service Agreement be filed with the Commission in accordance with the Tariff.

37.5 Addition to the Regional Transmission Expansion Plan: Any Attachment Facilities, Local Upgrades, or Network Upgrades constructed to accommodate an Interconnection Request shall be included in the Regional Transmission Expansion Plan upon their identification in an Interconnection Service Agreement filed with the Commission pursuant to Section 36.8.

37.6 Previously-Constructed Transmission Upgrades: In the event that Transmission Provider determines that accommodating an Interconnection Customer's Interconnection Request would require, in whole or in part, any Local Upgrade or Network Upgrade that was previously determined to be necessary to accommodate, and that was constructed in connection with, an Interconnection Request that was part of a previous Interconnection Queue, such Interconnection Customer may be responsible, subject to the terms of Section 42.3A below and in accordance with criteria prescribed by Transmission Provider in the PJM Manuals, for additional costs up to an amount equal to a proportional share of the costs of such previously constructed facility or upgrade. Cost responsibility under this Section 37.6 may be assigned with respect to any facility or upgrade: (a) the completed cost of which was less than \$1,000,000, provided that the facility or upgrade was placed in service no more than one year prior to the affected Interconnection Customer's Interconnection Queue Closing Date, or (b) the completed cost of which was \$1,000,000 or more, but less than \$10,000,000, provided that the facility or upgrade was placed in service no more than three years prior to the affected Interconnection Customer's Interconnection Queue Closing Date, or (c) the completed cost of which was \$10,000,000 or more, provided that the facility or upgrade was placed in service no more than five years prior to the affected Interconnection Customer's Interconnection Queue Closing Date. For purposes of applying this section, Transmission Provider may aggregate the costs of related facilities or upgrades, e.g., multiple replacements of or new circuit breakers at a single substation, that are, or are anticipated to be, constructed contemporaneously. In each Interconnection Service Agreement executed after the date on which this Section 37.6 first becomes effective, Transmission Provider shall identify any of the facilities or upgrades included in the Specifications to such Interconnection Service Agreement the costs of which Transmission Provider will aggregate for purposes of application of this section.

The following is the selected text from the PJM Operating Agreement, current as of February 21, 2003, which details the Regional Transmission Expansion Planning Protocol, the last paragraph of the Schedule 6, 1.8 specifically addresses the relationship between the PJM OATT and the Operating Agreement.

SCHEDULE 6

1. REGIONAL TRANSMISSION EXPANSION PLANNING PROTOCOL

1.1 Purpose and Objectives.

This Regional Transmission Expansion Planning Protocol shall govern the process by which the Members shall rely upon the Office of the Interconnection to prepare a plan for the enhancement and expansion of the Transmission Facilities in order to meet the demands for firm transmission service, and to support competition, in the PJM Control Area and PJM West Region. The Regional Transmission Expansion Plan to be developed shall enable the transmission needs in the PJM Control Area and PJM West Region to be met on a reliable, economic and environmentally acceptable basis.

1.2 Conformity with NERC and Other Applicable Criteria.

(a) NERC establishes Planning Principles and Guides to promote the reliability and adequacy of the North American bulk power supply as related to the operation and planning of electric systems.

(b) MAAC is responsible for ensuring the adequacy, reliability and security of the bulk electric supply systems in the MAAC region through coordinated operations and planning of generation and transmission facilities. Toward that end, it has adopted the NERC Planning Principles and Guides and has established detailed Reliability Principles and Standards for Planning the Bulk Electric Supply System of the MAAC Group.

(c) ECAR is responsible for ensuring the adequacy, reliability and security of the bulk electric supply systems in the ECAR region through coordinated operations and planning of generation and transmission facilities. Toward that end, it has adopted the NERC Planning Principles and Guides and has established detailed Reliability Principles and Standards for Planning the Bulk Electric Supply System of the ECAR Group.

(d) The Regional Transmission Expansion Plan shall conform with the applicable reliability principles, guidelines and standards of NERC, MAAC, ECAR, and other Applicable Regional Reliability Councils in accordance with the procedures detailed in the PJM Manuals.

1.3 Establishment of Committees.

(a) The Planning Committee shall be open to participation by all stakeholders and shall provide technical advice and assistance to the

Office of the Interconnection in all aspects of its regional planning functions. The Transmission Owners shall supply representatives to the Planning Committee to provide the data, information, and support necessary for the Office of the Interconnection to perform studies as required and to develop the Regional Transmission Expansion Plan. Other Members may provide representatives to the Planning Committee as they deem appropriate.

(b) The Transmission Expansion Advisory Committee established by the Office of the Interconnection will meet periodically with representatives of the Office of the Interconnection to provide advice and recommendations to the Office of the Interconnection to aid in the development of the Regional Transmission Expansion Plan. The Transmission Expansion Advisory Committee will invite participation by: (i) all Transmission Customers, as that term is defined in the PJM Tariff, and applicants for transmission service; (ii) any other entity proposing to provide Transmission Facilities to be integrated into the PJM Control Area or PJM West Region; (iii) all Members; (iv) the agencies and offices of consumer advocates of the States in the PJM Control Area or PJM West Region exercising regulatory authority over the rates, terms or conditions of electric service or the planning, siting, construction or operation of electric facilities and (v) any other interested entities or persons.

1.4 Contents of the Regional Transmission Expansion Plan.

(a) The Regional Transmission Expansion Plan shall consolidate the transmission needs of the region into a single plan which is assessed on the bases of maintaining the reliability of the PJM Control Area and PJM West Region in an economic and environmentally acceptable manner and of supporting competition in the PJM Control Area and in the PJM West Region.

(b) The Regional Transmission Expansion Plan shall reflect transmission enhancements and expansions, load and capacity forecasts and generation additions and retirements for the ensuing ten years.

(c) The Regional Transmission Expansion Plan shall, as a minimum, include a designation of the Transmission Owner or Owners or other entity that will own a transmission facility and how all reasonably incurred costs are to be recovered.

(d) The Regional Transmission Expansion Plan shall (i) avoid unnecessary duplication of facilities; (ii) avoid the imposition of unreasonable costs on any Transmission Owner or any user of Transmission Facilities; (iii) take into account the legal and contractual rights and obligations of the Transmission Owners; (iv) provide, if appropriate, alternative means for meeting transmission needs in the PJM Control Area and PJM West Region; and (v) provide for coordination with existing transmission systems and with appropriate interregional and local expansion plans.

1.5 Procedure for Development of the Regional Transmission Expansion Plan.

1.5.1 Commencement of the Process.

(a) The Office of the Interconnection shall initiate the enhancement and expansion study process if (i) required as a result of a need for transfer capability identified by the Office of the Interconnection in its evaluation of requests for firm transmission service with a term of one year or more or as a result of the Office of the Interconnection's on-going evaluation of transmission system adequacy and performance; (ii) identified as a result of the MAAC or ECAR reliability assessment or more stringent local reliability criteria, if any; (iii) constraints or available transfer capability shortage are identified by the Office of the Interconnection as a result of generation additions or retirements, evaluation of load forecasts or proposals for the addition of Transmission Facilities in the PJM Control Area or PJM West Region; or (iv) expansion of the transmission system is proposed by the Transmission Owners or others.

(b) The Office of the Interconnection shall notify the Transmission Expansion Advisory Committee of the commencement of an enhancement and expansion study. The Transmission Expansion Advisory Committee shall notify the Office of the Interconnection in writing of any additional transmission considerations to be included.

1.5.2 Development of Scope, Assumptions and Procedures.

Once the need for an enhancement and expansion study has been established, the Office of the Interconnection shall consult with the Transmission Expansion Advisory Committee to prepare the study's scope, assumptions and procedures.

1.5.3 Scope of Studies.

In general, enhancement and expansion studies shall include:

(a) An identification of existing and projected electric system limitations, with accompanying simulations to identify the costs of controlling those limitations. Potential enhancements and expansions will be proposed to mitigate limitations controlled by non-economic means.

(b) Evaluation and analysis of potential enhancements and expansions, including alternatives thereto, needed to mitigate such limitations.

(c) Identification, evaluation and analysis of potential enhancements and expansions for the purposes of supporting competition in the PJM Control Area and in the PJM West Region.

(d) Engineering studies needed to determine the effectiveness and compliance (with reliability criteria) of recommended enhancements and expansions.

1.5.4 Supply of Data.

(a) The Transmission Owners shall provide to the Office of the Interconnection on an annual basis a 10-year forecast of summer and

winter load and resources expected to be served by, or use, their Transmission Facilities. The forecast shall include to the extent known or reasonably capable of forecast: (i) a description of the total load to be served from each substation; (ii) the amount of any interruptible loads included in the total load (including conditions under which an interruption can be implemented and any limitations on the duration and frequency of interruptions); and (iii) a description of all generation resources to be located in the geographic region encompassed by the Transmission Owner's transmission facilities, including unit sizes, VAR capability, operating restrictions, and any must-run unit designations required for system reliability or contract reasons. The data required under this section shall be provided in the form and manner specified by the Office of the Interconnection.

(b) In addition to the foregoing, the Transmission Owners, those entities requesting transmission service and any other entities proposing to provide Transmission Facilities to be integrated into the PJM Control Area or PJM West Region shall supply any other information and data reasonably required by the Office of the Interconnection to perform the enhancement and expansion study.

(c) The Office of the Interconnection also shall solicit from the Members, Transmission Customers and other interested parties, including but not limited to electric utility regulatory agencies and consumer advocates of the States in the PJM Control Area and in the PJM West Region, information required by, or anticipated to be useful to, the Office of the Interconnection in its preparation of the enhancement and expansion study.

1.5.5 Coordination of the Regional Transmission Expansion Plan.

(a) The Regional Transmission Expansion Plan shall be developed in coordination with the transmission systems of the surrounding regional reliability councils and with the local transmission providers.

(b) The Regional Transmission Expansion Plan shall be developed by the Office of the Interconnection in consultation with the Transmission Expansion Advisory Committee during the enhancement and expansion study process.

1.5.6 Development of the Recommended Regional Transmission Expansion Plan.

(a) The Office of the Interconnection shall be responsible for the development of the Regional Transmission Expansion Plan and for conducting the studies on which the plan is based.

(b) Upon completion of its studies and analysis, the Office of the Interconnection shall prepare a recommended enhancement and expansion plan for review by the Transmission Expansion Advisory Committee. The Office of the Interconnection also shall invite interested parties to submit comments on the plan to the Transmission Expansion Advisory

Committee and to the Office of the Interconnection. The recommended plan shall separately identify enhancements and expansions for the PJM Control Area and those for the PJM West Region and shall include recommendations for cost responsibility, including directly assigned costs, for any enhancement or expansion, based on the planning analysis and other input from participants, including any indications of a willingness to bear cost responsibility for an enhancement or expansion.

(c) The recommended plan may include an enhancement or expansion requested by any participant which the Office of the Interconnection finds to be compatible with the Transmission System, though not required pursuant to Section 1.1, provided that the requestor accepts responsibility for ownership, construction and financing of the enhancement or expansion through an undertaking satisfactory to the Office of the Interconnection.

(d) Any Transmission Owner and other participants on the Transmission Expansion Advisory Committee may offer an alternative.

(e) If the Office of the Interconnection adopts the alternative, based upon its review of the relative costs and benefits, the ability of the alternative to supply the required level of transmission service, and its impact on the reliability of the Transmission Facilities, the Office of the Interconnection shall make any necessary changes to the recommended plan.

(f) If, based upon its review of the relative costs and benefits, the ability of the alternative to supply the required level of transmission service, and the alternative's impact on the reliability of the Transmission Facilities, the Office of the Interconnection does not adopt such alternative, the Transmission Owner or Owners whose alternative or alternatives have not been accepted or to whom cost responsibility has been assigned and other participants on the Transmission Expansion Advisory Committee may require that its or their alternative(s) be submitted to Alternative Dispute Resolution.

1.6 Approval of the Final Regional Transmission Expansion Plan.

(a) The PJM Board shall approve the final Regional Transmission Expansion Plan, including any alternatives therein, in accordance with the requirements of this Section 1.6. The Office of the Interconnection shall publish the current, approved Regional Transmission Expansion Plan on the PJM Internet site.

(b) If the facilities to be provided in the Regional Transmission Expansion Plan are acceptable, but the Transmission Owners and other entities who have indicated a willingness to bear some or all of the cost responsibility cannot unanimously agree on the allocation of the costs of enhancements or expansions, the cost responsibility shall be allocated (a) to those entities who have indicated a willingness to bear some or all of the cost responsibility, (b) for facilities that the Regional Transmission Expansion Plan designates for ownership by an entity other than a Transmission Owner, to that entity, and (c) otherwise among the Transmission Owners

in accordance with the following guidelines: i) All of the costs of Transmission Facilities (other than transformers) in the PJM Control Area with a nominal operating voltage of 500 kV or higher shall be allocated to all of the East Transmission Owners and the costs of such facilities in the PJM West Region shall be allocated to all of the West Transmission Owners;

ii) One-half of the costs of Transmission Facilities (other than transformers) with a nominal operating voltage of 230 kV or 345 kV in the PJM Control Area shall be allocated to all East Transmission Owners and one-half of the costs of such facilities shall be allocated to the East Transmission Owners in whose Zone, the enhancement or expansion is to be located and the costs of such facilities in the PJM West Region shall be allocated one-half to all West Transmission Owners and one-half to the West Transmission Owners in whose Zone the facilities are located;

iii) All of the costs of Transmission Facilities (other than transformers) with a nominal operating voltage below 230 kV shall be allocated to the Transmission Owner or Owners in whose Zone the enhancement or expansion is located; and

iv) One-half of the costs of transformers shall be allocated in accordance with the methodology specified in (a), (b), or (c) above, based upon the voltage at the high side of the transformer and one-half of the costs shall be allocated in accordance with the methodology specified in (a), (b), and (c) above based upon the voltage at the low side of the transformer, unless the low side of the transformer is less than 100 kV, in which case all of the costs of the transformer shall be allocated to the Transmission Owner or Owners in whose Zone the transformer is located.

(c) If a Regional Transmission Expansion Plan is not approved, or if the transmission service requested by any entity is not included in an approved Regional Transmission Expansion Plan, nothing herein shall limit in any way the right of any entity to seek relief pursuant to the provisions of Section 211 of the Federal Power Act.

(d) Following PJM Board approval, the final Regional Transmission Expansion Plan shall be submitted to the Applicable Reliability Council for verification that all enhancements or expansions conform to all reliability principles and standards of the Applicable Regional Reliability Council.

(e) For the purposes of Section 1.6(b), clause (c), any allocation of PJM Control Area costs to all of the East Transmission Owners shall be proportional to the load within the Zones in the PJM Control Area, and any allocation of PJM West Region costs to all of the West Transmission Owners shall be proportional to the load within the Zones in the PJM West Region. Load shall be measured consistent with the loads utilized to develop the rates included in Attachment H to the PJM Tariff.

1.7 Obligation to Build.

(a) Subject to the requirements of applicable law, government regulations and approvals, including, without limitation, requirements to obtain any necessary state or local siting, construction and operating permits, to the availability of required financing, to the ability to acquire necessary right-of-way, and to the right to recover, pursuant to appropriate financial arrangements and tariffs or contracts, all reasonably incurred costs, plus a reasonable return on investment, Transmission Owners designated as the appropriate entities to construct and own or finance enhancements or expansions specified in the Regional Transmission Expansion Plan shall construct and own or finance such facilities or enter into appropriate contracts to fulfill such obligations. However, nothing herein shall require any Transmission Owner to construct, finance or own any enhancements or expansions specified in the Regional Transmission Expansion Plan for which the plan designates an entity other than a Transmission Owner as the appropriate entity to construct and own or finance such enhancements or expansions.

(b) Nothing herein shall prohibit any Transmission Owner from seeking to recover the cost of enhancements or expansions on an incremental cost basis or from seeking approval of such rate treatment from any regulatory agency with jurisdiction over such rates.

1.8 Relationship to the PJM Open Access Transmission Tariff.

Nothing herein shall modify the rights and obligations of an Eligible Customer or a Transmission Customer, as those terms are defined in the PJM Tariff, with respect to required studies and completion of necessary enhancements or expansions. An Eligible Customer or Transmission Customer electing to follow the procedures in the PJM Tariff instead of the procedures provided herein, shall also be responsible for the related costs. The enhancement and expansion study process under this Protocol shall be funded as a part of the operating budget of the Office of PJM Interconnection, L.L.C.

On March 20, 2003, PJM filed proposed amendments to the OATT and Operating Agreement, in Docket No. RT01-2. This filing has not yet received FERC approval, and is available for review in its entirety on our website.³ For your convenience we provide the following **proposed** amended language for Section 37.3 of the OATT:

In the event that, in the context of the Regional Transmission Expansion Plan, it is determined that, to accommodate a Generation Interconnection Request, it is more economical or beneficial to the Transmission System to construct upgrades in addition to the minimum necessary to

³ The 3/20/03 filing includes a cover letter fully explaining the proposed changes, a complete revised tariff (Sixth Revised Volume No. 6) and a complete revised operating agreement. The material is not provided here in its entirety for brevity.

accommodate the Generation Interconnection Request, a Generation Interconnection Customer shall be obligated to pay only the costs of the minimum upgrades necessary to accommodate its Generation Interconnection Request. The Generation Interconnection Customer shall have the right of first refusal to pay for any or all of the upgrades in addition to the minimum, and to hold all Incremental Auction Revenue Rights and/or Incremental Available Transfer Capability Revenue Rights associated with the additional upgrades for which it agrees to pay. The remaining costs shall be borne by the Transmission Owners in accordance with Schedule 6 of the Operating Agreement and may be included in the revenue requirements of the Transmission Owners subject to FERC approval. If, based upon the date of the submission of a subsequent Interconnection Request, the Transmission Provider determines that a Generation Interconnection Customer will make use of additional economic capacity that exists or will exist as a result of facilities and upgrades constructed as a result of another Interconnection Request, then the Transmission Provider may require the Generation Interconnection Customer to pay an appropriate portion of the cost of the facilities and upgrades that produced the additional economic capacity.

The following is the **proposed** revision to the entire Section 37 of the OATT, which PJM filed at FERC on March 20, 2003:

37.1 Attachment Facilities: A Generation Interconnection Customer shall be obligated to pay for 100 percent of the costs of the Attachment Facilities necessary to accommodate its Generation Interconnection Request.

37.2 Local and Network Upgrades: A Generation Interconnection Customer shall be obligated to pay for 100 percent of the costs of the minimum amount of Local Upgrades and Network Upgrades necessary to accommodate its Generation Interconnection Request and that would not have been incurred under the Regional Transmission Expansion Plan but for such Generation Interconnection Request, net of benefits resulting from the construction of the upgrades, such costs not to be less than zero. Such costs and benefits shall include costs and benefits such as those associated with accelerating, deferring, or eliminating the construction of planned Local Upgrades and Network Upgrades, the construction of Local Upgrades and Network Upgrades resulting from modifications to the Regional Transmission Expansion Plan to accommodate the Generation Interconnection Request, or the construction of other Local Upgrades and Network Upgrades that are not and do not formally become part of the Regional Transmission Expansion Plan.

37.3 Additional Upgrades: In the event that, in the context of the Regional Transmission Expansion Plan, it is determined that, to accommodate a Generation Interconnection Request, it is more economical or beneficial to the Transmission System to construct upgrades in addition to the minimum necessary to accommodate the Generation Interconnection Request, a Generation Interconnection Customer shall be obligated to pay only the costs of the minimum upgrades necessary to accommodate its Generation Interconnection Request. The Generation Interconnection Customer shall have the right of first refusal to pay for any or all of the upgrades in addition to the minimum, and to hold all Incremental Auction Revenue Rights and/or Incremental Available Transfer Capability Revenue Rights associated with the additional upgrades for which it agrees to pay. The remaining costs shall be borne by the Transmission Owners in accordance with Schedule 6 of the Operating Agreement and may be included in the revenue requirements of the Transmission Owners subject to FERC approval. If, based upon the date of the submission of a subsequent Interconnection Request, the Transmission Provider determines that a Generation Interconnection Customer will make use of additional economic capacity that exists or will exist as a result of facilities and upgrades constructed as a result of another Interconnection Request, then the Transmission Provider may require the Generation Interconnection Customer to pay an appropriate portion of the cost of the facilities and upgrades that produced the additional economic capacity.

37.4 Specification of Costs in Interconnection Service Agreement: The cost responsibility of the Generation Interconnection Customer shall be specified in the Interconnection Service Agreement executed pursuant to Section 36.8 of the Tariff. If an Interconnection Customer does not agree with the Transmission Provider's determination of such cost responsibility, it may request that the matter be submitted to Dispute Resolution under Article 12 of the Tariff or, if concerning the Regional Transmission Expansion Plan, consistent with Schedule 5 of the Operating Agreement, or request that an unexecuted Interconnection Service Agreement be filed with the Commission in accordance with the Tariff.

37.5 Effect of IDR Transfer Agreement: A Generation Interconnection Customer may modify its cost responsibility for Network Upgrades and/or Local Upgrades as determined under this Section 37 by submitting an IDR Transfer Agreement in accordance with Section 49B of the Tariff that transfers to the Generation Interconnection Customer Incremental Deliverability Rights associated with Merchant Transmission Facilities. As provided in Section 49B, the Generation Interconnection Customer's cost responsibility shall be

modified only if it elects to terminate, and Transmission Provider confirms termination of, its participation in and cost responsibility for any Network Upgrade or Local Upgrade.

37.6 Regional Transmission Expansion Plan:

37.6.1 Any Attachment Facilities, Local Upgrades, or Network Upgrades constructed to accommodate an Interconnection Request shall be included in the Regional Transmission Expansion Plan upon their identification in an Interconnection Service Agreement filed with the Commission pursuant to Section 36.8.

37.6.2 In the event that termination of a Generation Interconnection Customer's participation in a previously identified Network Upgrade or Local Upgrade pursuant to Section 49B of the Tariff eliminates the need for such upgrade, Transmission Provider shall offer all Interconnection Customers whose Interconnection Requests preceded the IDR Transfer Agreement that facilitated such termination an opportunity to pursue and pay for (in whole or in part) such upgrade. Each Interconnection Customer shall have the right to hold all Incremental Auction Revenue Rights and/or Incremental Available Transfer Capability Revenue Rights associated with the additional upgrades (or portions thereof) for which it agrees to pay.

37.6.3 Transmission Provider shall remove from the Regional Transmission Expansion Plan any Network Upgrade or Local Upgrade in the event that the need for such upgrade is eliminated due to termination of a Generation Interconnection Customer's participation in such upgrade and other Interconnection Customers do not pursue and pay for the upgrade pursuant to Sections 37.6.2 or 42.6.2.

37.7 Previously-Constructed Transmission Upgrades:

In the event that Transmission Provider determines that accommodating an Interconnection Customer's Interconnection Request would require, in whole or in part, any Local Upgrade or Network Upgrade that was previously determined to be necessary to accommodate, and that was constructed in connection with, an Interconnection Request that was part of a previous Interconnection Queue, such Interconnection Customer may be responsible, subject to the terms of Sections 46.5 and 48.5 below and in accordance with criteria prescribed by Transmission Provider in the PJM Manuals, for additional costs up to an amount equal to a proportional share of the costs of such previously-constructed facility or upgrade. Cost responsibility under this Section 37.7 may be assigned with respect to any facility or upgrade: (a) the completed cost of which was less than \$1,000,000, provided that the facility or upgrade was placed in service no more than one year prior to the affected Interconnection Customer's Interconnection Queue Closing

Date, or (b) the completed cost of which was \$1,000,000 or more, but less than \$10,000,000, provided that the facility or upgrade was placed in service no more than three years prior to the affected Interconnection Customer's Interconnection Queue Closing Date, or (c) the completed cost of which was \$10,000,000 or more, provided that the facility or upgrade was placed in service no more than five years prior to the affected Interconnection Customer's Interconnection Queue Closing Date. For purposes of applying this section, Transmission Provider may aggregate the costs of related facilities or upgrades, e.g., multiple replacements of or new circuit breakers at a single substation, that are, or are anticipated to be, constructed contemporaneously. In each Interconnection Service Agreement executed after the date on which this Section 37.7 first becomes effective, Transmission Provider shall identify any of the facilities or upgrades included in the Specifications to such Interconnection Service Agreement the costs of which Transmission Provider will aggregate for purposes of application of this section.

As noted *supra*, on March 20, 2003, PJM filed proposes revisions to Schedule 6 of the Operating Agreement and the PJM OATT at FERC. In the proposed revisions to Schedule 6, PJM proposes a change to the Regional Transmission Expansion Planning Protocol, which is contained in Section 6 of the Operating Agreement, to introduce a methodology whereby PJM will plan for and have the authority to order Transmission Owners to build transmission to address unhedgeable congestion in the market. The proposed revisions to Schedule 6 of the PJM Operating Agreement are as follows:

SCHEDULE 6

REGIONAL TRANSMISSION EXPANSION PLANNING PROTOCOL

1. REGIONAL TRANSMISSION EXPANSION PLANNING PROTOCOL

1.1 Purpose and Objectives.

This Regional Transmission Expansion Planning Protocol shall govern the process by which the Members shall rely upon the Office of the Interconnection to prepare a plan for the enhancement and expansion of the Transmission Facilities in order to meet the demands for firm transmission service, and to support competition, in the PJM Control Area and PJM West Region. The Regional Transmission Expansion Plan to be developed shall enable the transmission needs in the PJM Control Area and PJM West Region to be met on a reliable, economic and environmentally acceptable basis.

1.2 Conformity with NERC and Other Applicable Criteria.

(a) NERC establishes Planning Principles and Guides to promote the reliability and adequacy of the North American bulk power supply as related to the operation and planning of electric systems.

(b) MAAC is responsible for ensuring the adequacy, reliability and security of the bulk electric supply systems in the MAAC region through coordinated operations and planning of generation and transmission facilities. Toward that end, it has adopted the NERC Planning Principles and Guides and has established detailed Reliability Principles and Standards for Planning the Bulk Electric Supply System of the MAAC Group.

(c) ECAR is responsible for ensuring the adequacy, reliability and security of the bulk electric supply systems in the ECAR region through coordinated operations and planning of generation and transmission facilities. Toward that end, it has adopted the NERC Planning Principles and Guides and has established detailed Reliability Principles and Standards for Planning the Bulk Electric Supply System of the ECAR Group.

(d) The Regional Transmission Expansion Plan shall conform with the applicable reliability principles, guidelines and standards of NERC, MAAC, ECAR, and other Applicable Regional Reliability Councils in accordance with the procedures detailed in the PJM Manuals.

1.3 Establishment of Committees.

(a) The Planning Committee shall be open to participation by all stakeholders and shall provide technical advice and assistance to the Office of the Interconnection in all aspects of its regional planning functions. The Transmission Owners shall supply representatives to the Planning Committee to provide the data, information, and support necessary for the Office of the Interconnection to perform studies as

reliability assessment or more stringent local reliability criteria, if any; (iii) constraints or available transfer capability shortage are identified by the Office of the Interconnection as a result of generation additions or retirements, evaluation of load forecasts or proposals for the addition of Transmission Facilities in the PJM Control Area or PJM West Region; or (iv) expansion of the transmission system is proposed by the Transmission Owners or others.

(b) The Office of the Interconnection shall notify the Transmission Expansion Advisory Committee of the commencement of an enhancement and expansion study. The Transmission Expansion Advisory Committee shall notify the Office of the Interconnection in writing of any additional transmission considerations to be included.

1.5.2 Development of Scope, Assumptions and Procedures.

Once the need for an enhancement and expansion study has been established, the Office of the Interconnection shall consult with the Transmission Expansion Advisory Committee to prepare the study's scope, assumptions and procedures.

1.5.3 Scope of Studies.

In general, enhancement and expansion studies shall include:

(a) An identification of existing and projected electric system limitations, with accompanying simulations to identify the costs of controlling those limitations. Potential enhancements and expansions will be proposed to mitigate limitations controlled by non-economic means.

(b) Evaluation and analysis of potential enhancements and expansions, including alternatives thereto, needed to mitigate such limitations.

(c) Identification, evaluation and analysis of potential enhancements and expansions for the purposes of supporting competition in the PJM Control Area and in the PJM West Region.

(d) Engineering studies needed to determine the effectiveness and compliance (with reliability criteria) of recommended enhancements and expansions.

1.5.4 Supply of Data.

(a) The Transmission Owners shall provide to the Office of the Interconnection on an annual basis a 10-year forecast of summer and winter load and resources expected to be served by, or use, their Transmission Facilities. The forecast shall include to the extent known or reasonably capable of forecast: (i) a description of the total load to be served from each substation; (ii) the amount of any interruptible loads included in the total load (including conditions under which an interruption can be implemented and any limitations on the duration and frequency of interruptions); and (iii) a description of all generation resources to be located in the geographic region encompassed by the Transmission Owner's transmission facilities, including unit sizes, VAR capability, operating restrictions, and any must-run unit designations required for system reliability or contract reasons. The data required under this section shall be provided in the form and manner specified by the Office of the Interconnection.

required and to develop the Regional Transmission Expansion Plan. Other Members may provide representatives to the Planning Committee as they deem appropriate.

(b) The Transmission Expansion Advisory Committee established by the Office of the Interconnection will meet periodically with representatives of the Office of the Interconnection to provide advice and recommendations to the Office of the Interconnection to aid in the development of the Regional Transmission Expansion Plan. The Transmission Expansion Advisory Committee will invite participation by: (i) all Transmission Customers, as that term is defined in the PJM Tariff, and applicants for transmission service; (ii) any other entity proposing to provide Transmission Facilities to be integrated into the PJM Control Area or PJM West Region; (iii) all Members; (iv) the agencies and offices of consumer advocates of the States in the PJM Control Area or PJM West Region exercising regulatory authority over the rates, terms or conditions of electric service or the planning, siting, construction or operation of electric facilities and (v) any other interested entities or persons.

1.4 Contents of the Regional Transmission Expansion Plan.

(a) The Regional Transmission Expansion Plan shall consolidate the transmission needs of the region into a single plan which is assessed on the bases of maintaining the reliability of the PJM Control Area and PJM West Region in an economic and environmentally acceptable manner and of supporting competition in the PJM Control Area and in the PJM West Region.

(b) The Regional Transmission Expansion Plan shall reflect transmission enhancements and expansions, load and capacity forecasts and generation additions and retirements for the ensuing ten years.

(c) The Regional Transmission Expansion Plan shall, as a minimum, include a designation of the Transmission Owner or Owners or other entity that will own a transmission facility and how all reasonably incurred costs are to be recovered.

(d) The Regional Transmission Expansion Plan shall (i) avoid unnecessary duplication of facilities; (ii) avoid the imposition of unreasonable costs on any Transmission Owner or any user of Transmission Facilities; (iii) take into account the legal and contractual rights and obligations of the Transmission Owners; (iv) provide, if appropriate, alternative means for meeting transmission needs in the PJM Control Area and PJM West Region; and (v) provide for coordination with existing transmission systems and with appropriate interregional and local expansion plans.

1.5 Procedure for Development of the Regional Transmission Expansion Plan.

1.5.1 Commencement of the Process.

(a) The Office of the Interconnection shall initiate the enhancement and expansion study process if (i) required as a result of a need for transfer capability identified by the Office of the Interconnection in its evaluation of requests for firm transmission service with a term of one year or more or as a result of the Office of the Interconnection's on-going evaluation of transmission system adequacy and performance; (ii) identified as a result of the MAAC or ECAR

(b) In addition to the foregoing, the Transmission Owners, those entities requesting transmission service and any other entities proposing to provide Transmission Facilities to be integrated into the PJM Control Area or PJM West Region shall supply any other information and data reasonably required by the Office of the Interconnection to perform the enhancement and expansion study.

(c) The Office of the Interconnection also shall solicit from the Members, Transmission Customers and other interested parties, including but not limited to electric utility regulatory agencies and consumer advocates of the States in the PJM Control Area and in the PJM West Region, information required by, or anticipated to be useful to, the Office of the Interconnection in its preparation of the enhancement and expansion study.

1.5.5 Coordination of the Regional Transmission Expansion Plan.

(a) The Regional Transmission Expansion Plan shall be developed in coordination with the transmission systems of the surrounding regional reliability councils and with the local transmission providers.

(b) The Regional Transmission Expansion Plan shall be developed by the Office of the Interconnection in consultation with the Transmission Expansion Advisory Committee during the enhancement and expansion study process.

1.5.6 Development of the Recommended Regional Transmission Expansion Plan.

(a) The Office of the Interconnection shall be responsible for the development of the Regional Transmission Expansion Plan and for conducting the studies on which the plan is based.

(b) Upon completion of its studies and analysis, the Office of the Interconnection shall prepare a recommended enhancement and expansion plan for review by the Transmission Expansion Advisory Committee. The Office of the Interconnection also shall invite interested parties to submit comments on the plan to the Transmission Expansion Advisory Committee and to the Office of the Interconnection. The recommended plan shall separately identify enhancements and expansions for the PJM Control Area and those for the PJM West Region and shall include recommendations for cost responsibility, including directly assigned costs, for any enhancement or expansion, based on the planning analysis and other input from participants, including any indications of a willingness to bear cost responsibility for an enhancement or expansion.

(c) The recommended plan may include an enhancement or expansion requested by any participant which the Office of the Interconnection finds to be compatible with the Transmission System, though not required pursuant to Section 1.1, provided that the requestor accepts responsibility for ownership, construction and financing of the enhancement or expansion through an undertaking satisfactory to the Office of the Interconnection.

(d) Any Transmission Owner and other participants on the Transmission Expansion Advisory Committee may offer an alternative.

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(e) If the Office of the Interconnection adopts the alternative, based upon its review of the relative costs and benefits, the ability of the alternative to supply the required level of transmission service, and its impact on the reliability of the Transmission Facilities, the Office of the Interconnection shall make any necessary changes to the recommended plan.

(f) If, based upon its review of the relative costs and benefits, the ability of the alternative to supply the required level of transmission service, and the alternative's impact on the reliability of the Transmission Facilities, the Office of the Interconnection does not adopt such alternative, the Transmission Owner or Owners whose alternative or alternatives have not been

accepted or to whom cost responsibility has been assigned and other participants on the Transmission Expansion Advisory Committee may require that its or their alternative(s) be submitted to Alternative Dispute Resolution.

1.6 Approval of the Final Regional Transmission Expansion Plan.

(a) The PJM Board shall approve the final Regional Transmission Expansion Plan, including any alternatives therein, in accordance with the requirements of this Section 1.6. The Office of the Interconnection shall publish the current, approved Regional Transmission Expansion Plan on the PJM Internet site.

(b) If the facilities to be provided in the Regional Transmission Expansion Plan are acceptable, but the Transmission Owners and other entities who have indicated a willingness to bear some or all of the cost responsibility cannot unanimously agree on the allocation of the costs of enhancements or expansions, the cost responsibility shall be allocated (a) to those entities who have indicated a willingness to bear some or all of the cost responsibility, (b) for facilities that the Regional Transmission Expansion Plan designates for ownership by an entity other than a Transmission Owner, to that entity, and (c) otherwise among the Transmission Owners in accordance with the following guidelines:

- i) All of the costs of Transmission Facilities (other than transformers) in the PJM Control Area with a nominal operating voltage of 500 kV or higher shall be allocated to all of the East Transmission Owners and the costs of such facilities in the PJM West Region shall be allocated to all of the West Transmission Owners;
- ii) One-half of the costs of Transmission Facilities (other than transformers) with a nominal operating voltage of 230 kV or 345 kV in the PJM Control Area shall be allocated to all East Transmission Owners and one-half of the costs of such facilities shall be allocated to the East Transmission Owners in whose Zone, the enhancement or expansion is to be located and the costs of such facilities in the PJM West Region shall be allocated one-half to all West Transmission Owners and one-half to the West Transmission Owners in whose Zone the facilities are located;
- iii) All of the costs of Transmission Facilities (other than transformers) with a nominal operating voltage below 230 kV shall be allocated to the Transmission Owner or Owners in whose Zone the enhancement or expansion is located; and

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- iv) One-half of the costs of transformers shall be allocated in accordance with the methodology specified in (a), (b), or (c) above, based upon the voltage at the high side of the transformer and one-half of the costs shall be allocated in accordance with the methodology specified in (a), (b), and (c) above based upon the voltage at the low side of the transformer, unless the low side of the transformer is less than 100 kV, in which case all of the costs of the transformer shall be allocated to the Transmission Owner or Owners in whose Zone the transformer is located.

(c) If a Regional Transmission Expansion Plan is not approved, or if the transmission service requested by any entity is not included in an approved Regional Transmission Expansion Plan, nothing herein shall limit in any way the right of any entity to seek relief pursuant to the provisions of Section 211 of the Federal Power Act.

(d) Following PJM Board approval, the final Regional Transmission Expansion Plan shall be submitted to the Applicable Reliability Council for verification that all enhancements or expansions conform to all reliability principles and standards of the Applicable Regional Reliability Council.

(e) For the purposes of Section 1.6(b), clause (c), any allocation of PJM Control Area costs to all of the East Transmission Owners shall be proportional to the load within the Zones in the PJM Control Area, and any allocation of PJM West Region costs to all of the West Transmission Owners shall be proportional to the load within the Zones in the PJM West Region. Load shall be measured consistent with the loads utilized to develop the rates included in Attachment H to the PJM Tariff.

1.7 Obligation to Build.

(a) Subject to the requirements of applicable law, government regulations and approvals, including, without limitation, requirements to obtain any necessary state or local siting, construction and operating permits, to the availability of required financing, to the ability to acquire necessary right-of-way, and to the right to recover, pursuant to appropriate financial arrangements and tariffs or contracts, all reasonably incurred costs, plus a reasonable return on investment, Transmission Owners designated as the appropriate entities to construct and own or finance enhancements or expansions specified in the Regional Transmission Expansion Plan shall construct and own or finance such facilities or enter into appropriate contracts to fulfill such obligations. However, nothing herein shall require any Transmission Owner to construct, finance or own any enhancements or expansions specified in the Regional Transmission Expansion Plan for which the plan designates an entity other than a Transmission Owner as the appropriate entity to construct and own or finance such enhancements or expansions.

(b) Nothing herein shall prohibit any Transmission Owner from seeking to recover the cost of enhancements or expansions on an incremental cost basis or from seeking approval of such rate treatment from any regulatory agency with jurisdiction over such rates.

1.8 Relationship to the PJM Open Access Transmission Tariff.

Nothing herein shall modify the rights and obligations of an Eligible Customer or a Transmission Customer, as those terms are defined in the PJM Tariff, with respect to required studies and completion of necessary enhancements or expansions. An Eligible Customer or Transmission Customer electing to follow the procedures in the PJM Tariff instead of the procedures provided herein, shall also be responsible for the related costs. The enhancement and expansion study process under this Protocol shall be funded as a part of the operating budget of the Office of the Interconnection.